

CLAIMS

What is claimed is:

1. A method for associating machine readable information on singulated or non-singulated packages carried on a conveyor with dimensioning data, comprising:

orienting a handheld scanner toward a package on the conveyor to read machine readable information on the package and transmitting the machine readable information to a controller;

determining a specific time when the machine readable information is read;

determining pose data of the handheld scanner when the machine readable information is read, wherein the pose data comprises a three dimensional location and a pitch, a yaw, and a roll of the handheld scanner;

determining a beam vector with the controller using the pose data;

determining a conveyor position at the specific time;

using the conveyor position and the specific time to determine when an associated portion of the conveyor reaches a dimensioning station;

obtaining dimensioning data for at least one package on the associated portion of the conveyor; and

correlating the dimensioning data with the beam vector in the controller to associate the dimensioning data for the package with the corresponding machine readable information read by the handheld scanner.

2. The method of claim 1, wherein the handheld scanner is not tethered except for a power line and/or a signal output line.

3. The method of claim 1, wherein the handheld scanner is not tethered.

4. The method of claim 3, further comprising the handheld scanner transmitting to the controller via a radio frequency signal.

5. The method of claim 3, further comprising the handheld scanner transmitting to the controller via an infrared signal.

6. The method of claim 1, wherein the step of determining the pose data includes obtaining data from a plurality of ultrasonic transmitters located proximate to the conveyor and a plurality of ultrasonic receivers located on the handheld scanner.

7. The method of claim 1, wherein the machine readable information is read prior to obtaining the dimensioning data.

8. The method of claim 1, further comprising reading the machine readable information in response to activation of a trigger on the handheld scanner.

9. A system for correlating machine readable information with dimensioning data for conveyor borne singulated or non-singulated packages, comprising:

- a conveyor adapted to transport a plurality of packages thereon, at least some of the packages bearing machine readable information;

- a movable handheld scanner located in an area proximate to the conveyor;

- a position detector that determines a three dimensional position and a pitch, a roll, and a yaw of the movable handheld scanner;

- a controller that receives at least one signal from the position detector and is adapted to determine a beam vector between the movable handheld scanner and the machine readable information on one of the plurality of packages when the machine readable information is read by the handheld scanner, the controller being adapted to determine an associated portion of the conveyor that corresponds to the beam vector; and

- a dimensioning station for determining dimensioning data for the at least one package on the associated portion of the conveyor, the controller being adapted to correlate the dimensioning data with the beam vector to associate the

dimensioning data with the one of the plurality of packages bearing the corresponding machine readable information.

10. The system of claim 9, wherein the position detector comprises:
a plurality of receiver sensors disposed on the movable handheld scanner;
and

a plurality of transmitting sensors located in an area where the handheld scanner is used, the transmitting sensors communicating with the plurality of receiver sensors to determine a three dimensional position of, a roll of, a pitch of, and a yaw of the movable handheld scanner.

11. The system of claim 9, wherein the position detector comprises:
a first plurality of sensors disposed on the movable handheld scanner; and
a second plurality of sensors located in an area where the handheld scanner is used, the second plurality of sensors communicating with the first plurality of sensors to determine a three dimensional position of, a roll of, a pitch of, and a yaw of the movable handheld scanner.